### Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

### Title V AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Trace Die Cast, Incorporated

Mailing Address: 140 North Graham Avenue, Bowling Green, KY 42101

Source Name: Same as above Mailing Address: Same as above

Source Location: Same as above 4096.3N, 554.3E

Permit Number: V-01-006, Revision 1

Source A. I. #: 4142

Activity #: APE20040001 Review Type: Operating KYEIS ID #: 21-227-00085

**SIC Code:** 3363

**Regional Office** Bowling Green

County: Warren

**Application** 

Complete Date: March 7, 2001
Issuance Date: August 1, 2002
Revision Date: May 13, 2005
Expiration Date: August 1, 2007

John Lyons, Director Division for Air Quality

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Rev	Permit type	Log#	Complete	<b>Issuance</b>	Summary of
#			Date	Date	Action
	Initial Issuance	50840	3/7/01	8/1/02	
1	Title V Revision	56331	12/01/04	5/13/05	Addition of points to each major category

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#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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## SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**Group Requirements:** Group 1

Emission point:	Melting rate (tons of ingots / hour / furnace):	Salt fluxing rate (lb of flux salt / hour / furnace):	Maximum continuous rating (mmbtu / hour / furnace):	Construction commenced:
101(CF1) Central Melt Furnace 1	2		8.0	May 28, 1992
102(CF2) Central Melt Furnace 2	Z		0.0	November 24, 1993
103(CF3) Central Melt Furnace 3	1.5		6.0	May 28, 1992
104(CF4) Central Melt Furnace 4	2.5	0.833		
105(CF5) Central Melt Furnace 5			10.0	March 5, 1998
106(CF6) Central Melt Furnace 6	3		10.0	
107(CF7) Central Melt Furnace 7				January 1, 2005

#### **Description:**

Each emission point is a natural gas-fired reverberatory melt furnace, which melts clean aluminum as well as clean scrap from the Die Cast Machines and performs molten aluminum fluxing with chloride/fluoride based flux salt. There is no control equipment for all the furnaces. Except for emission point 103(CF3), each furnace has 2 individual stacks through which the emissions exhaust.

#### **APPLICABLE REGULATIONS:**

- a. 401 KAR 59:010 New process operations. Applicable to particulate and visible emissions from each emission point.
- b. 401 KAR 63:060 List of hazardous air pollutants, petition process, lesser quantity designations, and source categories. Applicable to emissions of hazardous air pollutants (HAPs) from each emission point, specifically, chromium, lead, manganese, nickel, HCl, and HF.

#### 1. **Operating Limitations:**

The permittee shall melt only clean aluminum ingots and clean scrap from the DCMs.

#### 2. Emission Limitations:

Pursuant to Regulation 401 KAR 59:010:

- a. Visible emissions from each emission point shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.
- b. Hourly particulate emissions from each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

 $E = 3.59 P^{0.62}$ 

# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Where E is the particulate emission in lbs/hour and P is the process weight of aluminum ingots in tons/hour.

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#### COMPLIANCE DEMONSTRATION:

The process weight shall be determined in average hourly tons by averaging the daily aluminum process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \times EF$$

Where E is particulate emissions in lbs/hr, P is averaged process weight of aluminum ingots in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of aluminum ingots.

### 3. <u>Testing Requirements:</u>

None

#### 4. Specific Monitoring Requirements:

For each emission point:

- a. To provide reasonable assurance that the particulate matter emission limitations are being met pursuant to 401 KAR 59:010, the permittee shall monitor the following:
  - i. The monthly rates and types of materials processed, specifically, the aluminum ingots and flux salts.
  - ii. The monthly total hours of operation.
- b. To provide reasonable assurance that the visible emission limitations are being met pursuant to 401 KAR 59:010, the permittee shall:
  - i. Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 semi-annually, or more frequently if requested by the Division.
  - ii. Perform a qualitative visual observation of the opacity of emissions from each stack/vent on a weekly basis and maintain a log of the observation. See 5. Recordkeeping Requirements.
  - iii. Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- c. In addition, the permittee shall monitor emissions of each HAP by the following equation:

$$E = P \times EF$$

Where E is HAP emissions in lbs/hr, P is averaged process weight of aluminum ingots in tons/hr and EF is the KYEIS HAP emission factor in lbs/ton of aluminum ingots.

### 5. **Specific Recordkeeping Requirements:**

For each emission point:

- a. The permittee shall keep records of the following:
  - i. The monthly rates and types of materials processed.
  - ii. The monthly total hours of operation.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall keep records of Method 9 opacity tests and maintain a log of qualitative visual observations performed. The log shall note:
  - i. Whether any air emissions (except for water vapor) were visible from the vent/stack.
  - ii. All emission points from which visible emissions occurred
  - iii. Whether the visible emissions were normal for the process.
- c. The permittee shall keep records of emissions for each HAP.
- **6. Specific Reporting Requirements:** None
- 7. **Specific Control Equipment Operating Conditions:** None
- 8. Alternate Operating Scenarios: None

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Group Requirements:** Group 2 and Group 3

	Holding note	-	Marrimum	
	Holding rate (tons of molten	Calt flurring rate	Maximum continuous	
	aluminum / hour	Salt fluxing rate (lb of flux salt /	rating (mmbtu /	Construction
Emission point:		hour / furnace):	hour / furnace):	commenced:
201(HF1) Holding Furnace 1	/ furnace): 0.5	nour / turnace):	0.25	commencea:
	0.3		0.23	
202(HF2) Holding Furnace 2				
203(HF3) Holding Furnace 3				
204(HF4) Holding Furnace 4				N. 1 11 1000
215(HF15) Holding Furnace 15				March 11, 1988
205(HF5) Holding Furnace 5	0.625			
206(HF6) Holding Furnace 6				
207(HF7) Holding Furnace 7				
208(HF8) Holding Furnace 8				
212(HF12) Holding Furnace 12				
213(HF13) Holding Furnace 13				March 11, 1988
214(HF14) Holding Furnace 14				
209(HF9) Holding Furnace 9				February 28, 1996
210(HF10) Holding Furnace 10			0.33	
211(HF11) Holding Furnace 11			0.55	December 7, 1994
216(HF16) Holding Furnace 16				
221(HF21) Holding Furnace 21				
222(HF22) Holding Furnace 22				
223(HF23) Holding Furnace 23				
224(HF24) Holding Furnace 24				
225(HF25) Holding Furnace 25				March 5, 1998
234(HF34) Holding Furnace 34				
235(HF35) Holding Furnace 35				
236(HF36) Holding Furnace 36		0.06		
231(HF31) Holding Furnace 31	0.50			
232(HF32) Holding Furnace 32	0.00			March 7, 2001
233(HF33) Holding Furnace 33				,, 2001
241(HF41) Holding Furnace 41				
242(HF42) Holding Furnace 42				
243(HF43) Holding Furnace 43				
244(HF44) Holding Furnace 44				
245(HF45) Holding Furnace 45				
			0.25	August 1, 2002
251(HF51) Holding Furnace 51				
252(HF52) Holding Furnace 52				
253(HF53) Holding Furnace 53				
254(HF54) Holding Furnace 54				
255(HF55) Holding Furnace 55				
261(HF61) Holding Furnace 61				
262(HF62) Holding Furnace 62				
263(HF63) Holding Furnace 63				
264(HF64) Holding Furnace 64				
265(HF65) Holding Furnace 65	1.5		0.33	January 1, 2005
271(HF71) Holding Furnace 71	1.0		0.55	1, 2000
272(HF72) Holding Furnace 72				
273(HF73) Holding Furnace 73				
274(HF74) Holding Furnace 74				
275(HF75) Holding Furnace 75				

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission point:	Casting rate (tons of molten aluminum / hour / caster):	Casting lubricants used for each caster:	Lubricant usage rate for each caster:	Construction commenced:
301(DCM1) Die Cast Machine 1	0.5	uscu for each easter.	0.188 gal/hour	May 28, 1992
302(DCM2) Die Cast Machine 2	0.5	-	0.136 gal/hour	March 11, 1988
303(DCM3) Die Cast Machine 3			0.195 gal/hour	May 28, 1992
304(DCM4) Die Cast Machine 4			0.02 lb/hour	March 11, 1988
315(DCM15) Die Cast Machine 15			0.016 gal/hour	May 28, 1992
305(DCM5) Die Cast Machine 5			ovo 10 gaz nour	Way 20, 1772
306(DCM6) Die Cast Machine 6	0.625		0.282 gal/hour	March 11, 1988
307(DCM7) Die Cast Machine 7	0.023		0.282 gal/hour	Water 11, 1900
308(DCM8) Die Cast Machine 8			0.292 gal/hour	December 7, 1994
312(DCM12) Die Cast Machine 12			0.031 lb/hour	December 7, 1774
313(DCM13) Die Cast Machine 13			0.024 gal/hour	May 28, 1992
314(DCM14) Die Cast Machine 14		Die Slick #1515	0.021 gui/110u1	Way 20, 1992
3079(DCM9) Die Cast Machine 9		Plunger Slick #450		February 28, 1996
310(DCM10) Die Cast Machine 10		Hydro Slick #FR-200		1 coruary 20, 1990
311(DCM11) Die Cast Machine 11		Chevron EP2 Grease		December 7, 1994
316(DCM16) Die Cast Machine 16		Chevron 220 Way		December 7, 1994
321(DCM21) Die Cast Machine 21		Oil		
` '			0.275 1/1	
322(DCM22) Die Cast Machine 22 323(DCM23) Die Cast Machine 23			0.375 gal/hour	
,			0.152 gal/hour 0.390 gal/hour	
324(DCM24) Die Cast Machine 24 325(DCM25) Die Cast Machine 25			0.041 lb/hour	March 5, 1998
334(DCM34) Die Cast Machine 34			0.041 10/110ur 0.032 gal/hour	
335(DCM35) Die Cast Machine 35			0.032 gai/110di	
336(DCM36) Die Cast Machine 36				
331(DCM31) Die Cast Machine 31	0.50			
332(DCM32) Die Cast Machine 32	0.50			March 7, 2001
333(DCM32) Die Cast Machine 32				Wiaicii 7, 2001
341(DCM41) Die Cast Machine 41				
342(DCM42) Die Cast Machine 42				
343(DCM42) Die Cast Machine 42				
344(DCM44) Die Cast Machine 44		Die Slick #1515	0.275 201/hour	
345(DCM45) Die Cast Machine 45		Plunger Slick #450	0.375 gal/hour 0.152 gal/hour	
351(DCM51) Die Cast Machine 51		Hydro Slick #FR-200	0.132 gal/hour	August 1, 2002
351(DCM51) Die Cast Machine 51 352(DCM52) Die Cast Machine 52		Chevron 220 Way	0.007 gal/hour	
353(DCM52) Die Cast Machine 52		Oil	0.007 gai/iloui	
354(DCM54) Die Cast Machine 54				
355(DCM55) Die Cast Machine 55				
361(DCM61) Die Cast Machine 61				
362(DCM62) Die Cast Machine 62				
363(DCM63) Die Cast Machine 63				
364(DCM64) Die Cast Machine 64		Die Slick #1515	1 125 gol/have	
365(DCM65) Die Cast Machine 65		Plunger Slick #450	1.125 gal/hour 0.456 gal/hour	
	1.5	Hydro Slick #FR-200	1.170 gal/hour	January 1, 2005
371(DCM71) Die Cast Machine 71		Chevron 220 Way	0.021 gal/hour	
372(DCM72) Die Cast Machine 72		Oil	0.021 gai/110ul	
373(DCM73) Die Cast Machine 73				
374(DCM74) Die Cast Machine 74				
375(DCM75) Die Cast Machine 75				

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Description:**

8.

Emission points in the 200 series are holding furnaces which hold the molten aluminum before feeding it to corresponding die cast machines in the 300 series. Each holding furnace is natural gasfired and performs molten aluminum fluxing with chloride/fluoride based flux salt. Each caster uses 5 casting lubricants to cast molten aluminum into aluminum parts. All the holding furnaces and casters have no control equipment and vent through 2 different vents in the ceiling of the die cast areas.

#### **APPLICABLE REGULATIONS:**

**Operating Limitations:** 

**Alternate Operating Scenarios:** 

401 KAR 63:060 – List of hazardous air pollutants, petition process, lesser quantity designations, and source categories. Applicable to emissions of hazardous air pollutants (HAPs) from each emission point, specifically, chromium, lead, manganese, nickel, HCl, and HF from the holding furnaces, and diethylene glycol from the die cast machines.

None

1.	Operating Limitations:	None		
2.	<b>Emission Limitations</b> :	None		
3.	<b>Testing Requirements:</b>	None		
4.	<u>Specific Monitoring Requirements:</u> For each emission point, the permittee shall monitor emissions of each HAP by the following equation:			
	$E = P \times EF$			
	Where E is HAP emissions in lbs/hr, P is averaged process tons/hr and EF is the KYEIS HAP emission factor in lbs/to	•		
5.	Specific Recordkeeping Requirements: For each emission point, the permittee shall keep records HAP.	of monthly emissions for each		
6.	<b>Specific Reporting Requirements:</b>	None		
7.	<b>Specific Control Equipment Operating Conditions:</b>	None		

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### REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Group Requirements:** Group 4

Emission point:	Process waste water rate (gallons / hour / evaporator):	Maximum continuous rating (mmbtu / hour / evaporator):	Construction commenced:
401(Evap1) Evaporator 1	33	0.395	May 28, 1992
402(Evap2) Evaporator 2	33	0.393	November 24, 1993
403(Evap3) Evaporator 3			May 28, 1992
404(Evap4) Evaporator 4			March 7, 2001
405(Evap5) Evaporator 5	130	1.50	August 1, 2002
406(Evap6) Evaporator 6	130	1.30	August 1, 2002
407(Evap7) Evaporator 7			January 1, 2005
408(Evap8) Evaporator 8			January 1, 2005

#### **Description:**

Each emission point is a natural gas-fired evaporator, which separates oil from the oil-water effluent of the die casting process. Each evaporator is equipped with a stack and there is no control equipment for all evaporators.

#### **APPLICABLE REGULATIONS:**

- a. 401 KAR 59:095 New oil-effluent water separator. Applicable to hydrocarbon emissions from each emission point.
- b. 401 KAR 63:060 List of hazardous air pollutants, petition process, lesser quantity designations, and source categories. Applicable to emissions of hazardous air pollutant (HAP) from each emission point, specifically, diethylene glycol.

#### 1. Operating Limitations:

Pursuant to Regulation 401 KAR 59:095:

- a. An oil-effluent water separator shall be one (1) of the following types of vessels: a vessel equipped with a floating roof, a vessel equipped with a vapor recovery system, or their equivalent.
- b. All gauging and sampling devices shall be gastight except when gauging and sampling is taking place.

2.	<b>Emission Limitations</b> :	None
3.	Testing Requirements:	None

#### 4. Specific Monitoring Requirements:

For each emission point, the permittee shall monitor emissions of HAP by the following equation:

$$E = P \times EF$$

Where E is HAP emissions in lbs/hr, P is averaged process volume of process wastewater in gals/hr and EF is the KYEIS HAP emission factor in lbs/gal of process wastewater.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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5. **Specific Recordkeeping Requirements:** 

For each emission point, the permittee shall keep records of emissions for HAP.

**6. Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None

8. <u>Alternate Operating Scenarios</u>: None

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**Group Requirements:** Group 5

Emission point:	Shot blasting rate (tons of aluminum castings / hour / shot blaster):	Steel shots usage rate: (lbs of steel shots / hour / shot blaster):	Construction commenced:
501(SB1) Shot Blast Machine 1		2	May 28, 1992
502(SB2) Shot Blast Machine 2	1.0	3	December 30, 1992
503(SB3) Shot Blast Machine 3		6	December 50, 1992
504(SB4) Shot Blast Machine 4	3.75	72	August 1, 2002
505(SB5) Shot Blast Machine 5	3.73	12	January 1, 2005

#### **Description:**

Each emission point is a shot blast machine, which polishes the aluminum castings with abrasive steel shots. 501 –503 are equipped with a baghouse, and 504-505 are equipped with a wet spray dist collector to control particulate emissions and a stack through which the emissions exhaust.

#### **APPLICABLE REGULATIONS:**

- a. 401 KAR 59:010 New process operations. Applicable to particulate and visible emissions from each emission point.
- b. 401 KAR 63:060 List of hazardous air pollutants, petition process, lesser quantity designations, and source categories. Applicable to emissions of hazardous air pollutant (HAP) from each emission point, specifically, manganese.

#### 1. **Operating Limitations:**

None

#### 2. <u>Emission Limitations</u>:

Pursuant to Regulation 401 KAR 59:010:

- a. Visible emissions from each emission point shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.
- b. Hourly particulate emissions from each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight of steel shots in tons/hour.

#### **COMPLIANCE DEMONSTRATION:**

The process weight shall be determined in average hourly tons by averaging the daily steel shots process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

 $E = P \times EF$ 

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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Where E is particulate emissions in lbs/hr, P is averaged process weight of steel shots in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of steel shots.

#### 3. <u>Testing Requirements:</u>

None

#### 4. Specific Monitoring Requirements:

For each emission point:

- a. To provide reasonable assurance that the particulate matter emission limitations are being met pursuant to 401 KAR 59:010, the permittee shall monitor the following:
  - i. The monthly rates and types of materials processed, specifically, the aluminum castings and steel shots.
  - ii. The monthly total hours of operation.
- b. To provide reasonable assurance that the visible emission limitations are being met pursuant to 401 KAR 59:010, the permittee shall:
  - i. Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 semi-annually, or more frequently if requested by the Division.
  - ii. Perform a qualitative visual observation of the opacity of emissions from each stack/vent on a weekly basis and maintain a log of the observation. See 5. Recordkeeping Requirements.
  - iii. Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- c. In addition, the permittee shall monitor emissions of HAP by the following equation:

 $E = P \times EF$ 

Where E is HAP emissions in lbs/hr, P is averaged process weight of steel shots in tons/hr and EF is the KYEIS HAP emission factor in lbs/ton of steel shots.

#### 5. Specific Recordkeeping Requirements:

For each emission point:

- a. The permittee shall keep records of the following:
  - i. The monthly rates and types of materials processed.
  - ii. The monthly total hours of operation.
- b. The permittee shall keep records of Method 9 opacity tests and maintain a log of qualitative visual observations performed. The log shall note:
  - i. Whether any air emissions (except for water vapor) were visible from the vent/stack.
  - ii. All emission points from which visible emissions occurred
  - iii. Whether the visible emissions were normal for the process.
- c. The permittee shall keep records of emissions for HAP.

#### **6.** Specific Reporting Requirements: None

#### 7. **Specific Control Equipment Operating Conditions:** None

# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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**8.** <u>Alternate Operating Scenarios:</u>

None

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#### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description

Generally Applicable Regulation

601(PH1) Pre-heater for aluminum ingots

None

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

As required by the material incorporated by reference by 401 KAR 52:020, Section 1; compliance with annual emissions and processing limitations imposed contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

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## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements.
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement;
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 52:020 Section 3(h)]
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(h) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
  - b. To access and copy any records required by the permit.
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

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# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the division's Bowling Green Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The semi-annual reports are due January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

- 6. a. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Bowling Green Regional Office concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
  - b. As required by the material incorporated by reference by 401 KAR 52:020, Section 6; the owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Bowling Green Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by general condition F.5.

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# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 7. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Bowling Green Regional Office and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Bowling Green Regional Office 1508 Western Avenue Bowling Green, KY 42104-3356 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 8. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.
- 9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

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#### **SECTION G - GENERAL CONDITIONS**

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section (3)(1)(d) and 42 USC 7661 through 7671q (Title V of the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12:
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

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### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15b]
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]
- 11. This permit shall not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11]
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source
- 16. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - (a) Applicable requirements are included and specifically identified in the permit; or
  - (b) Non-applicable requirements that are expressly identified in this permit.

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### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

(b) <u>Permit Expiration and Reapplication Requirements</u>

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 52:020, Section 12(6)(a)]

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the division sets. [401 KAR 52:030 Section 8(2)]

#### (c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.
- (d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u>

For emission points 230(HF30)-233(HF33), 330(DCM30)-333(DCM33), and 405(Evap5):

- 1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Bowling Green Regional Office in writing, with a copy to the division's Frankfort Central Office, notification of the following:

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### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

- a. The date when construction commenced.
- b. The date of start-up of the affected facilities listed in this permit.
- c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct compliance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
- 6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

#### (e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### (f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

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### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

a. An emergency occurred and the permittee can identify the cause of the emergency;

- b. The permitted facility was at the time being properly operated;
- c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations are exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- e. This requirement does not relieve the source from other local, state or federal notification requirements
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Permits, Section 24(2)]
- (g) Risk Management Provisions
- 1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

- 2. If requested, submit additional relevant information to the division or the U.S. EPA.
- (h) Ozone depleting substances
- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined

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at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.

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- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.